

REMARKS

Claims 28, 31, 32, 33, 35, 36 and 45 are amended to improve their form. No new matter is presented.

Response to Claim Objections

Claim 33 is objected to for referring to a canceled claim.

Claim 33 is amended to depend from claim 28, thereby obviating the objection.

Claim 35 is objected to for “lour”.

Claim 35 is amended by replacing “:lour” with “flour”, thereby obviating the rejection.

Claim 36 is objected to for the names of the microorganisms.

Claim 36 is amended to italicize the name of *Saccharomyces*, thereby obviating the objection.

Accordingly, Applicants respectfully request withdrawal of the claim objections.

Response to Claim Rejections under 35 U.S.C. § 112

Claims 28-51 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

Specifically, in response to the Office Action, claim 28 is amended herein to delete the preferred embodiment introduced by “and particularly for” and to clarify that it is the dry flavour enhancing agent that comprises acid fermented flour and yeast extract.

Claim 45 has been amended to recite “the weight percentage” and by deleting “between firstly” and “and secondly”.

Accordingly, Applicants respectfully request withdrawal of the rejection.

Response to Claim Rejections under 35 U.S.C. § 103

Claims 28-48 and 50-51 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bel Rhlid et al (6,432,459).

According to the Examiner, Bel Rhlid et al discloses a method for preparing a flavouring agent by bioconversion by yeast of a sulphur-containing compound (such as cysteine or glutathione) in the presence of an organic acid (such as lactic acid). The Examiner asserts that acid fermented flour contains lactic acid and yeast extract contains sulphur-compounds such as cysteine and glutathione. Thus, the Examiner concludes that, it was obvious to use acid fermented flour and yeast extract as starting products in the bioconversion method disclosed in Bel Rhlid et al.

Applicants traverse the rejection.

Applicants respectfully disagree with the Examiner for the following reasons.

First, the Examiner broadly asserts that acid fermented flour contains lactic acid and that yeast extract contains sulphur-compounds such as cysteine and glutathione. While it is clear from the specification of the present application that acid fermented flour actually contains lactic acid, the Examiner does not provide any proof that yeast extract contains sulphur-compounds such as cysteine and glutathione.

An obviousness rejection can not be based on non-demonstrated assertions of the Examiner. Absent any prior art evidence that yeast extract was actually known on the art to contain sulphur-compounds such as cysteine and glutathione, the rejection is thus not founded. Thus, Applicants request that the Examiner provide evidence in support of his assertion.

Even if the Examiner were to provide such evidence, the dry flavour enhancing agent according to the present invention would still not be obvious over the following reasons.

The dry flavour enhancing agent according to the present invention comprises acid fermented flour and yeast extract, in their native form, i.e., without any step of bioconversion by active yeast.

In particular, yeast extract is, as defined in the present specification (see page 4, lines 5-11), the soluble fraction obtained after yeast hydrolysis, and thus does not contain active yeast.

As a result, in the dry flavour enhancing agent according to the present invention, the lactic acid content of acid fermented flour has not been bioconverted into the 2-acetyl-2-thiazoline (2-AT) compound obtained in the method of Bel Rhlid et al (see Bel Rhlid et al at col. 1, lines 38-45).

The dry flavour enhancing agent according to the present invention is thus completely distinct from the flavouring agent of Bel Rhlid et al, since the properties of the flavouring agent of Bel Rhlid et al are linked to the presence of compound 2-AT (see Bel Rhlid et al at col. 1, lines 21-26), the presence of which necessitates a step of bioconversion by active yeast.

In addition, the flavouring agent of Bel Rhlid et al (containing 2-AT) is added to bread dough containing classical bread dough ingredients, including active yeast, as in the present invention (see Bel Rhlid et al, Example 5 and specification of the present application, Table 1, page 17).

Thus, Bel Rhlid et al and the present invention describe completely distinct flavouring agents.

Moreover, when the dry flavour enhancing agent according to the present invention is added to bread dough containing active yeast, there is no formation in the bread dough of the flavouring agent of Bel Rhlid et al.

Indeed, active yeast included in bread dough is intended to ferment flour of the bread dough. In addition, the flavouring agent is only a minor component (less than 1.25%) of the bread dough (see Table 1, page 17 of the present application).

The probability that active yeast contained in bread dough according to the invention may find a sulphur-compound and lactic acid in appropriate amounts in close proximity is thus very low.

In contrast, the preparation of the flavouring agent of Bel Rhlid et al is based on the specific bioconversion of a sulphur-containing compound by yeast in the presence of an organic acid, and preferably a sugar (see Bel Rhlid et al at col. 2, lines 29-31 and Example 1), in solution and in the absence of other "parasitic" compounds.

In addition, the reaction conditions of the bioconversion of a sulphur-containing compound by yeast in the presence of an organic acid disclosed in Bel Rhlid et al involve a basic pH (see Example 1 of Bel Rhlid et al, in which the pH is maintained to 9.8 throughout the bioconversion reaction). In contrast, it is clear that the internal pH of a bread dough is not basic.

Therefore, even if active yeast contained in bread dough according to Bel Rhlid et al contained a sulphur-compound and lactic acid in appropriate amounts in close proximity, the differences in reaction conditions (solution/solid; absence of other compounds/complex mixture; distinct pH) are such that it is clear that there is no formation in bread dough according to the present invention of the flavouring agent of Bel Rhlid et al.

In view of the above comments, the Applicants submit that claims 28-48 and 50-51 are not obvious over Bel Rhlid et al. Accordingly, Applicants respectfully request withdrawal of the rejection.

Claim 49 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Mohlenkamp, Jr., et al (US 4,243,691).

The Examiner asserts Mohlenkamp, Jr., et al discloses a salt substitute comprising 5'-nucleotides and that the salt substitute has an enhanced salty flavour. The Examiner further asserts that yeast extract contains 5'-nucleotides. The Examiner thus concludes that it would be obvious to use compositions comprising yeast extract to reduce the salt component.

Applicants traverse the rejection.

Applicants respectfully disagree with the Examiner for the following reasons.

First, the Examiner broadly asserts that yeast extract contains 5'- nucleotides. However, the Examiner does not provide any proof that yeast extract contains 5'-nucleotides.

An obviousness rejection can not be based on non-demonstrated assertions of the Examiner. Absent any prior art evidence that yeast extract was actually known in the art to contain 5'-nucleotides, the rejection is thus not founded.

Applicants therefore request that the Examiner cites evidence in support of his position.

Should the Examiner provide such prior art evidence, the use of the dry flavour enhancing agent according to the present invention as a salt substitute would still not be obvious over Mohlenkamp, Jr., et al for the following reasons.

The salt substitute disclosed in Mohlenkamp, Jr., et al is a complex mixture made of 5 distinct ingredients: 5'-nucleotides, amino acid mixture, sugar, potassium phosphate and potassium chloride. 5'-nucleotides are thus only one component of this complex mixture.

In addition, 5'-nucleotides are clearly not the main and most important ingredient of the salt substitute of Mohlenkamp, Jr., et al. Indeed, 5'-nucleotides represent only 2-6% of the salt substitute.

More importantly, Mohlenkamp, Jr., et al clearly indicated that the most important ingredient of the salt substitute is potassium chloride (see Mohlenkamp, Jr., et al at col. 5, lines 13-16 relating to potassium chloride as "very important" while other ingredients are only referred to as "important" and indicating the potassium chloride is the primary source of the salty impression).

In fact, the combination of the other 4 compounds of the salt substitute of Mohlenkamp, Jr., et al (and not only 5' nucleotides) only permits to enhance the salty effect linked to the presence of potassium chloride (see col. 5, lines 45-46) and contributes to the "mellowing and fullness of flavour of the salt substitute" (see col. 5, lines 35-37).

Therefore, 5'-nucleotides represent a minor ingredient of the salt substitute of Mohlenkamp, Jr., et al, which only permits, in combination with three other ingredients that are not present in the dry flavouring agent, to enhanced the salty effect of potassium chloride, the main compound of the salt substitute of Mohlenkamp, Jr., et al responsible for the salty impression.

Mohlenkamp, Jr., et al thus clearly does not teach an important role for 5'-nucleotides as a salt substitute, since its contribution necessitates the presence of potassium chloride and 3 other ingredients.

Finally, the dry flavouring agent of the present invention is not constituted of yeast extract but also contains acid fermented flour, and it is clearly indicated that the improved flavouring properties of the dry flavouring agent of the present invention are due to a synergistic effect of the claimed combination of yeast extract and acid fermented flour (see specification, page 3, lines 12-16, page 21, line 9 to page 22, line 13).

This synergistic effect is not only related to the salty effect of the dry flavouring agent of the invention, but also to the fact that it permits a more balanced global flavour to be obtained than when using acid fermented flour or yeast extract separately (see Table 2, page 19), which allows for the use of the agent of the present invention in a much wider range of bakery products (see page 22, lines 10-13).

In view of the above, Applicants submit that the present invention as recited in claim 49 is not obvious over Mohlenkamp, Jr., et al. Accordingly, Applicants respectfully request withdrawal of the rejection.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

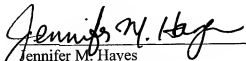
SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: December 15, 2009


Jennifer M. Hayes
Registration No. 40,641